

Title (en)
POWER TOOL BATTERY PACK WITH WIRELESS COMMUNICATION

Title (de)
ELEKTROWERKZEUGBATTERIEPACK MIT DRAHTLOSER KOMMUNIKATION

Title (fr)
BLOC-BATTERIE D'OUTIL ÉLECTRIQUE À COMMUNICATION SANS FIL

Publication
EP 3220508 A1 20170920 (EN)

Application
EP 17161294 A 20170316

Priority
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Abstract (en)
Trigger pull tracking, charge time estimation, and other features for a power tool battery pack with wireless communication. A battery pack system includes a power tool battery pack and a processor. The battery pack includes a plurality of cells and a voltage sensor connected to the plurality of cells. The processor is in communication with the voltage sensor that detects a voltage across the plurality of cells using the voltage sensor. The processor further converts the voltage across the plurality of cells to a state of charge; determines a charge rate of a charger charging the battery pack; and determines a conversion factor based on the charge rate. The processor then generates a time to full charge of the battery pack based on the state of charge, the charge rate, and the scalar conversion factor. The processor may further generate current traces for the battery pack.

IPC 8 full level
H02J 7/00 (2006.01); **G01R 31/36** (2006.01); **H01M 50/569** (2021.01)

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Citation (search report)
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• [I] WO 2015007145 A1 20150122 - TENCENT TECH SHENZHEN CO LTD [CN]
• [I] EP 2899844 A1 20150729 - NISSAN MOTOR [JP]
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AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

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AU 2019202198 A1 20190418; AU 2019202198 B2 20210408; CA 2961094 A1 20170916; CN 107204640 A 20170926;
CN 107204640 B 20211221; CN 110061540 A 20190726; CN 110061540 B 20231024; TW 201806282 A 20180216; TW 202139557 A 20211016;
TW I733775 B 20210721; TW I811718 B 20230811; US 10408884 B2 20190910; US 11143707 B2 20211012; US 2017269167 A1 20170921;
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